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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Amr M. Mohsen  
Assignee: Aptix Corporation  
Title: FIELD PROGRAMMABLE PRINTED CIRCUIT BOARD  
Serial No.: 08/632,298 Filed: April 12, 1996  
Batch No.: J55 Date Allowed: March 13, 2000  
Examiner: H. Jones Group Art Unit: 2763  
Docket No.: M-1007-6C US

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San Jose, California  
May 19, 2000

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ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D. C. 20231

**REQUEST FOR COPY OF SUBSTITUTE PTO FORM 1449**

Sir:

Taking note of the Notice of Allowance mailed 13 March 2000 for the above patent application, Applicant's attorney has not received a copy of the substitute PTO Form 1449 which accompanied the Information Disclosure Statement ("IDS") dated 20 September 1996 and which, as appropriate, has been examiner initialed to indicate that the Examiner has considered the seventy listed documents in examining this application. None of the papers supplied by the PTO to Applicant, i.e., Applicant's attorney, to date, in connection with this patent application refer to the foregoing IDS or to the substitute PTO Form 1449 which accompanied that IDS. Accordingly, it is respectfully requested that the Examiner furnish Applicant's attorney with a copy of the foregoing substitute PTO Form 1449 as initialed by the Examiner to indicate that the Examiner has, as appropriate, considered all seventy

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SER. NO. 08/632,298

documents listed in that substitute PTO Form 1449. It is further respectfully requested that the Examiner telephone Applicant's attorney at 408-453-9200, ext. 1371, to discuss this matter and then fax the examined-initialed copy of the preceding substitute PTO Form 1449 to Applicant's attorney at 408-453-7979.

Enclosed is a copy of the acknowledgement postcard which accompanied the 20 September 1996 IDS and which was later returned by the PTO. The acknowledgement postcard provides that "70 Cited References" are enclosed and bears the PTO date stamp of "SEP 23 1996". Nothing on the acknowledgement postcard, as returned by the PTO, indicates that the 20 September 1996 IDS failed to include a copy of any of the seventy documents listed in the substitute PTO Form 1449 which accompanied that IDS. Hence, a *prima facie* case is established that the PTO did receive the 20 September 1996 IDS, the accompanying substitute PTO Form 1449, and copies of all seventy cited documents.

The 20 September 1996 IDS was submitted prior to the first substantive office action on the present application. Accordingly, the Examiner was obligated to consider all seventy documents listed in the substitute PTO Form 1449 which accompanied that IDS.

Applicant's attorney notes that documents are occasionally misplaced at the PTO or fail to reach intended PTO files. In the event that the 20 September 1996 IDS failed to reach the PTO file for the present application, enclosed is a copy of that IDS, along with a copy of the substitute PTO Form 1449 which accompanied that IDS. Further enclosed are copies of the two search reports cited in the 20 September 1996 IDS.

Copies of the seventy documents listed in the substitute PTO Form 1449 which accompanied the 20 September 1996 IDS are not enclosed here. However, if any or all of those listed documents are not in the PTO file for the present application or/and are not

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readily available to the Examiner, please contact Applicant's attorney as soon as possible to discuss the matter.

If any or all of the seventy documents listed in the substitute PTO Form 1449 which accompanied the 20 September 1996 IDS have not been considered to date by the Examiner, those documents should be considered now in examining the present application before it issues. Applicant's attorney recognizes, of course, that the PTO should withdraw the present application from issue if the Examiner believes that any of those seventy documents makes any of the allowed claims unpatentable. In that event, the Examiner should reopen prosecution of the present prosecution and arrange for the PTO to refund the issue fee being paid largely simultaneously with this request.

Applicant's attorney thanks the Examiner for his/her cooperation in handling this matter as soon as possible. If there are any other questions or issues that need to be discussed, please telephone Applicant's attorney at the above telephone number, i.e. 408-453-9200, ext. 1371.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on May 19, 2000.

*Ronald J. Meetin* 19 May 2000  
Attorney for Applicant(s) Date of Signature

Respectfully submitted,

*Ronald J. Meetin*

Ronald J. Meetin  
Attorney for Applicant  
Reg. No. 29,089

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WASHINGTON, DC 20231

Inventor: Amr M. Mohsen  
Assignee: Aptix Corporation  
Serial No.: 08/632,298  
Filed: April 12, 1996  
Title: FIELD PROGRAMMABLE PRINTED CIRCUIT BOARD  
Attorney Docket No.: M-1007-6C US

**Enclosed:**

- (1) Information Disclosure Statement (2 pages)
- (2) Substitute PTO 1449 (6 pages)
- (3) 70 Cited References
- (4) Copy of European Search Report (2 pages)
- (5) Copy of International Search Report (2 pages)
- (6) Return Receipt Postcard

RJM:pd  
September 20, 1996



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FRANKLIN & FREE

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Amr R. Mohsen  
 Assignee: Aptix Corporation  
 Title: FIELD PROGRAMMABLE PRINTED CIRCUIT BOARD  
 Serial No.: 08/632,298 Filed: April 12, 1996  
 Examiner: Unknown Group Art Unit: Unknown  
 Attorney Docket No.: M-1007-6C US



San Jose, California  
 September 20, 1996

COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D. C. 20231

INFORMATION DISCLOSURE STATEMENT

sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the documents listed on the accompanying substitute PTO Form 1449 are called to the attention of the PTO in regard to the above patent application. Copies of these documents are enclosed.

All of these documents were cited in parent U.S. patent application, Ser. No. 08/171,992.

Certain of these documents were cited in the European search report for European patent application EP 90310252 corresponding to grandparent U.S. patent application Ser. No. 07/410,194. Certain of these documents were cited in the PCT search report for PCT international patent application PCT/US92/08115 corresponding to U.S. patent application 07/764,263, a continuation-in-part of the grandparent application. Copies of these search reports are enclosed.

Citation of the above documents shall not be construed as an admission that the documents are necessarily prior art with respect to the present invention. Nor shall citation of these documents be construed as a representation that a search has been made, other than as described above. Also, citation of

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the above documents shall not be construed as an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 CFR 1.56(b).

Respectfully submitted,

*Ronald J. Meetin*

Ronald J. Meetin  
Attorney for Applicants  
Reg. No. 29,089

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C., 20231, on September 20, 1996

20 September 1996

Date of Signature

*Ronald J. Meetin*

Attorney for Applicant(s)

U.S. Department of Commerce, Patent and Trademark Office		Atty Docket No.	Serial No.
		M-1007-6C US	08/632,298
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Applicant	
		Amr M. Mohsen	
		Filing Date	Group
		04/12/96	Unknown

## U.S. Patent Documents

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA	4,124,899	11/1978	Birkner et al			
AB	4,146,902	3/1979	Tanimoto et al			
AC	4,241,307	12/1980	Hong			
AD	4,245,273	1/1981	Feinberg			
AE	4,327,355	4/1982	Genter et al			
AF	4,354,228	10/1982	Moore et al			
AG	4,433,331	2/1984	Kollaritsch			
AH	4,441,075	4/1984	McMahon			
AI	4,455,495	6/1984	Masuhara et al			
AJ	4,458,297	7/1984	Stopper et al			
AK	4,467,400	8/1984	Stopper			

## Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	AL	177,261 A2	5/1986	EPO				
	AM	204,034 A2	12/1986	EPO				
	AN	310,357 A3	4/1989	EPO				
	AO	329,018 A3	8/1989	EPO				
	AP	59-161839	9/1984	Japan				

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Bogdan, "An Electrically Programmable Silicon Circuit Board", 1987, pp. 472-476.
	AS	Donnell, "Crosspoint Switch: APLD Approach," <u>Digital Design</u> , July 1986, pp. 40-42, 44.
	AT	Fiduccia et al, "A Linear-Time Heuristic for Improving Network Partitions," 19th ACM/IEEE Design Automation Conf., June 14-16, 1982, pp. 175-181, reprinted in Comp. Paps. Design Automation Conf., 1988, pp. 241-247.

Examiner Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

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		Amr M. Mohsen	
		Filing Date	Group
MAY 22 2000		04/12/96	Unknown

## U.S. Patent Documents

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA	4,479,088	10/1984	Stopper			
AB	4,486,705	12/1984	Stopper			
AC	4,509,008	4/1985	Das Gupta et al			
AD	4,631,686	12/1986	Ikawa et al			
AE	4,638,246	1/1987	Blank et al			
AF	4,649,413	3/1987	Kelly			
AG	4,703,436	10/1987	Varshney			
AH	4,706,216	11/1987	Carter			
AI	4,717,988	1/1988	Landis			RECEIVED MAY 08 2002 Technology Center 2100
AJ	4,727,268	2/1988	Hori			
AK	4,749,947	6/1988	Gheewala			

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						Translation	
	Document	Date	Country	Class	Subclass	Yes	No
AL	WO 85/03804	8/1985	PCT				
AM	WO 90/04233	4/1990	PCT				
AN							
AO							
AP							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Hantusch, "The PIM: A Programmable Interconnection Module", <u>IEE Colloquim Dig.</u> , Colloquim on IC Design-Gate Arrays, 21 November 1984, pp. 8.1 - 8.4.
AS	Hyden et al, "Silicon Circuit Boards: Off-the-Shelf Convenience," <u>Elect. Pack. &amp; Prod.</u> , Apr. 1988, pp. 70-74.
AT	Lauther, "A Min-Cut Placement Algorithm for General Cell Assemblies Based on a Graph Representation," 16th Design Automation Conf., June 25-27, 1979, pp. 1-10, reprinted in <u>Comp. Paps. Design Automation Conf.</u> , 1988, pp. 182-191.

Examiner Date Considered

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(Use several sheets if necessary)		Amr M. Mohsen	
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MAY 22 2000		04/12/96	Unknown

## U.S. Patent Documents

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA	4,758,745	7/1988	Elgamal et al			
AB	4,779,340	10/1988	Kihm et al			
AC	4,786,904	11/1988	Graham et al			
AD	4,813,017	3/1989	Wong			
AE	4,817,093	3/1989	Jacobs			
AF	4,821,176	6/1990	Ward et al			
AG	4,826,776	5/1989	Brandt et al			MAY 08 2002
AH	4,833,402	5/1989	Boegh-Petersen			
AI	4,840,924	6/1989	Kinbara			Technology Center 2100
AJ	4,847,732	7/1989	Stopper et al			
AK	4,860,165	8/1989	Cassinelli			

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## Foreign Patent Documents

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	AL							
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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Lee et al, "A New Global Router for Row-Based Layout," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 180-183.
	AS	Lin et al, "A Detailed Router Based on Simulated Evolution," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 180-183.
	AT	Marek-Sadowska, "Two Dimensional Router for Double Layer Layout," 22nd ACM/IEEE Design Automation Conf., June 23-26, 1985, pp. 117-123.

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		04/12/96	Unknown
U.S. Patent Documents			

*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA	4,866,432	9/1989	Goetting			
AB	4,870,302	9/1989	Freeman			
AC	4,873,459	10/1989	El Gamal			
AD	4,877,599	10/1989	Lees			
AE	4,884,122	11/1989	Eichelberger et al			
AF	4,894,605	1/1990	Ringleb et al			RECEIVED
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AI	5,015,885	5/1991	El Gamal			Technology Center 2100
AJ	5,036,473	7/1991	Butts et al			
AK	5,107,146	4/1992	El-Ayat			

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AM							
AN							
AO							
AP							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Swager, "Crosspoint-switch ICs Enter Digital Domain", <u>Technology Update</u> , <u>EDN</u> , pp. 76 - 86, February 16, 1989.
AS	Tzeng et al, "Codar: A Congestion-Directed General Area Router," IEEE Int'l Conf., on CAD, Nov. 7-10, 1988, pp. 30-33.
AT	Wooley et al, "Active Substrate System Integration", IEEE, July 1987, pp. 468-471.

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		Filing Date	Group
		04/12/96	Unknown
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*Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
AA	5,109,353	4/1992	Sample et al			
AB	5,231,588	7/1993	Agrawal et al			
AC	5,253,181	10/1993	Marui et al			
AD	5,255,203	10/1993	Agrawal et al			
AE	5,295,082	3/1994	Chang et al			
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AG						
AH						
AI						
AJ						
AK						

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	Document	Date	Country	Class	Subclass	Yes	No
AL							
AM							
AN							
AO							
AP							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	HP-12C Owner's Handbook and Problem Solving Guide, Hewlett-Packard Company, Palo Alto, CA, 1981, pp. 220-221.
AS	IBM Tech. Discl. Bul., "Logically Controlled Chip Interconnection Technique," Aug. 1989, vol. 32, no. 3B, pp. 294-299.
AT	

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